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(54) Scaffold fixation device for use in articular cartilage repair

(57) A device for attaching a tissue replacement scaffold to a bone has a platform (12) positionable in substantially parallel relationship to the bone for retaining the tissue scaffold proximate to the bone. A post (14) extends from the platform and is insertable into a hole formed in the bone. One or more ribs (24) extend from a side surface of the post along a portion of its length.

The ribs are mounted on opposing flexible members (18,20) and establish an interference fit relative to the hole in the bone tissue. The ribs are urged radially outwardly by the flexible members and have a sharp edge that grips the sides of the hole in the bone such that the ribs restrict withdrawal of the device. Vertical ribs (160) may also be included to prevent rotation of the device within the hole in the bone.

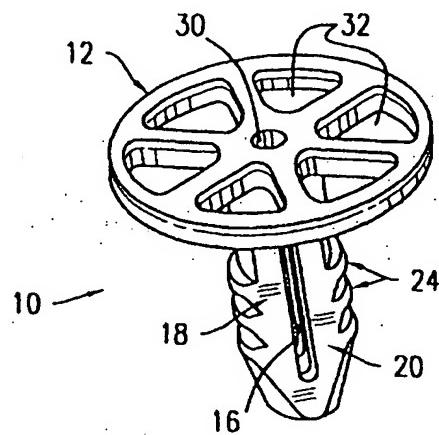


FIG. 2

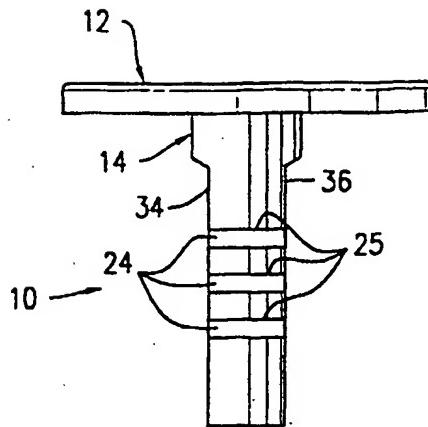


FIG. 3

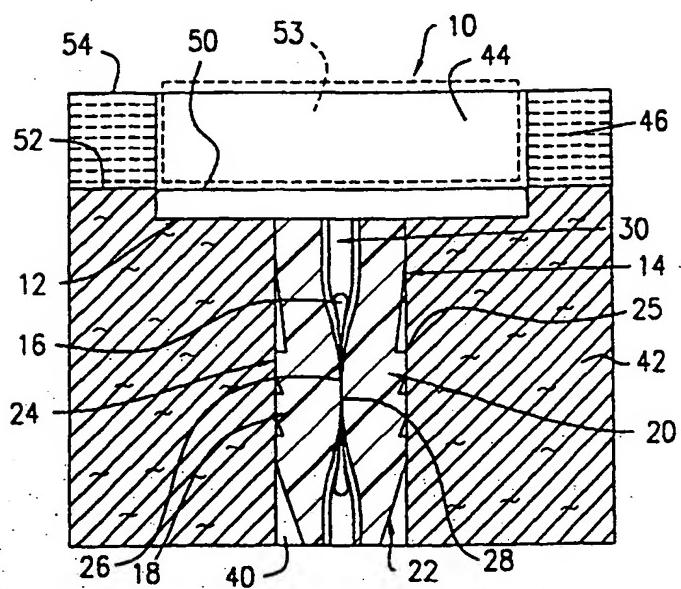


FIG. 4

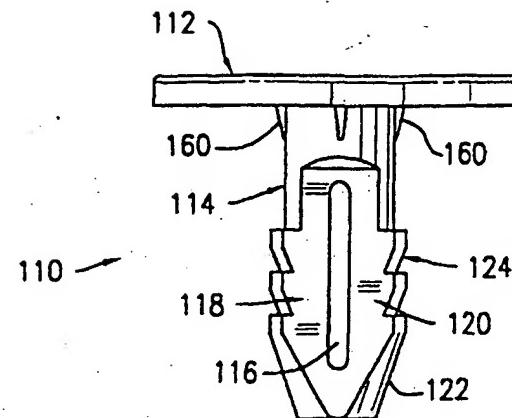


FIG. 5

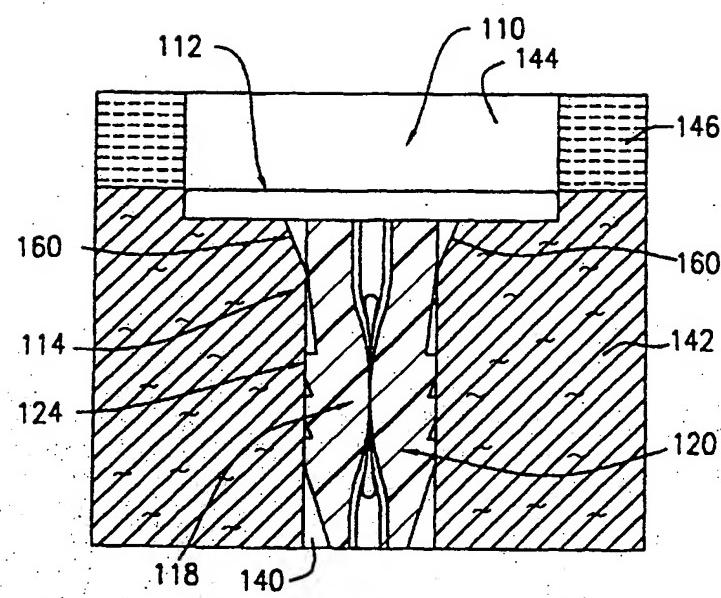


FIG. 6



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EUROPEAN SEARCH REPORT

Application Number

EP 02 25 1289

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	WO 00 74554 A (MATRIX BIOTECHNOLOGIES INC) 14 December 2000 (2000-12-14) * claims 1,27; figures 1-5,28 *	1-20	A61F2/00 A61F2/30 A61B17/68 A61B17/064 A61B17/56
X,D	US 5 632 745 A (SCHWARTZ ROBERT E) 27 May 1997 (1997-05-27) * figure 2 *	1	
X,P	EP 1 129 675 A (ETHICON INC) 5 September 2001 (2001-09-05) * figure 2 *	18	
			TECHNICAL FIELDS SEARCHED (Int.Cl.)
			A61F A61B
<p>The present search report has been drawn up for all claims</p>			
Place of search	Date of completion of the search	Examiner	
MUNICH	7 June 2002	Newman, B	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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07-06-2002

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 0074554	A	14-12-2000	US	6251143 B1	26-06-2001
			AU	5177200 A	28-12-2000
			WO	0074554 A2	14-12-2000
			US	2001010023 A1	26-07-2001
US 5632745	A	27-05-1997	WO	9725942 A1	24-07-1997
			AU	694838 B2	30-07-1998
			AU	4693396 A	27-08-1996
			AU	4855996 A	11-08-1997
			CA	2212544 A1	15-08-1996
			EP	0808136 A1	26-11-1997
			EP	0814731 A1	07-01-1998
			JP	10504217 T	28-04-1998
			WO	9624302 A1	15-08-1996
			US	5769899 A	23-06-1998
			US	5749874 A	12-05-1998
			AU	697372 B2	01-10-1998
			JP	2000513240 T	10-10-2000
EP 1129675	A	05-09-2001	US	6371958 B1	16-04-2002
			AU	2479201 A	06-09-2001
			EP	1129675 A2	05-09-2001
			JP	2001293003 A	23-10-2001